requirements (see list at end of this article) outlined in OpNav Instruction 5100.12G, which is covered extensively in the Navy's motorcycle rider course. The victim had completed that course in March 2001.

A 1984 high-school graduate, the victim joined the Navy in 1985, with hopes of becoming a translator. Instead, she became a dental hygienist for the next eight years. She then joined the Naval Reserve and went to dental school, graduating in 1998. Soon afterward, she was commissioned a lieutenant in the dental corps and spent four years overseas before being sent to San Diego for duty. She was scheduled to be discharged in August 2004.

As a result of this tragedy, the victim won't travel or climb any more mountains (she once climbed Mount Fuji). She also won't be able to pursue her interest in children's dental-health programs. More importantly, her parents will have to raise her 14-year-old daughter.

OpNavInst 5100.12G requires all Navy people operating a motorcycle or riding one as

a passenger, on or off base, to wear this equipment:

- A helmet (meeting the U.S. DoT standard), with the chinstrap fastened securely under the chin.
- Eye-protective devices (impact or shatterresistant goggles or full-face shield attached to the helmet). A windshield, fairing or eyeglasses alone are not proper eye protection.
- Long-sleeved shirt or jacket, long-legged trousers, and full-fingered gloves or mittens designed for use on a motorcycle.
- Sturdy footwear. Leather boots or over-theankle shoes are strongly encouraged.
- Brightly colored outer upper garment during the day and a reflective upper garment during the night. The outer upper garment must be clearly visible and cannot be covered. Military uniforms do not meet these criteria.

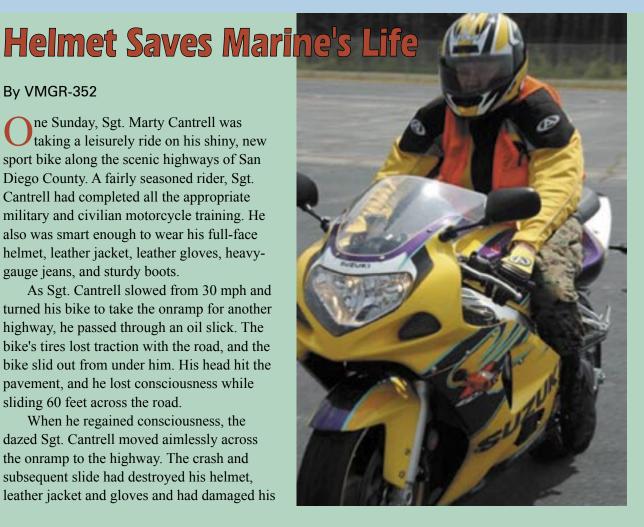
If you need more convincing that PPE works for motorcyclists, consider the two testimonials that follow.

By VMGR-352

ne Sunday, Sgt. Marty Cantrell was taking a leisurely ride on his shiny, new sport bike along the scenic highways of San Diego County. A fairly seasoned rider, Sgt. Cantrell had completed all the appropriate military and civilian motorcycle training. He also was smart enough to wear his full-face helmet, leather jacket, leather gloves, heavygauge jeans, and sturdy boots.

As Sgt. Cantrell slowed from 30 mph and turned his bike to take the onramp for another highway, he passed through an oil slick. The bike's tires lost traction with the road, and the bike slid out from under him. His head hit the pavement, and he lost consciousness while sliding 60 feet across the road.

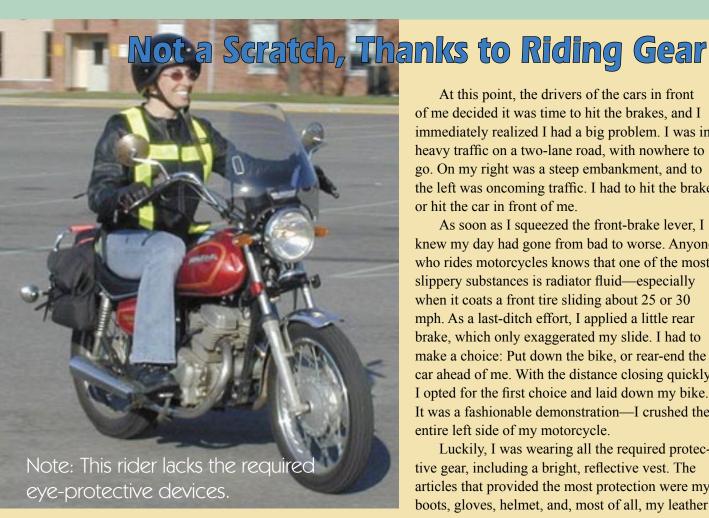
When he regained consciousness, the dazed Sgt. Cantrell moved aimlessly across the onramp to the highway. The crash and subsequent slide had destroyed his helmet, leather jacket and gloves and had damaged his



8 Sea&Shore motorcycle to the tune of \$9,000. Miraculously, he emerged without a scratch to his body and only a minor concussion, which caused him to miss just one day of work.

Clearly, this incident was a disaster narrowly avoided. When asked today, Sgt. Cantrell will testify that his helmet saved his life. It took all the force of the collision. Motorcycling hazards can be mitigated. Ride safely, wear protective gear, and learn from others' experiences.

The preceding is a shorter version of an article that appeared in the summer 2003 issue of the Naval Safety Center's Ground Warrior magazine.



By Lt. George Hartwell, HSL-42

It was around 6 a.m. one morning, with the sun Ljust starting to show, as I headed to work. Traffic was stop-and-go, the norm for this stretch of road.

I hadn't gone very far when I suddenly heard a noise, then saw a lot of steam and smelled a putrid odor. A quick look revealed something I didn't want to see: My bike's cooling system had sprung a leak. Hot antifreeze was spraying all over the inside of the cycle's instrument area, on the front tire, and down the radiator—the source of the steam I was seeing.

At this point, the drivers of the cars in front of me decided it was time to hit the brakes, and I immediately realized I had a big problem. I was in heavy traffic on a two-lane road, with nowhere to go. On my right was a steep embankment, and to the left was oncoming traffic. I had to hit the brakes or hit the car in front of me.

As soon as I squeezed the front-brake lever, I knew my day had gone from bad to worse. Anyone who rides motorcycles knows that one of the most slippery substances is radiator fluid—especially when it coats a front tire sliding about 25 or 30 mph. As a last-ditch effort, I applied a little rear brake, which only exaggerated my slide. I had to make a choice: Put down the bike, or rear-end the car ahead of me. With the distance closing quickly, I opted for the first choice and laid down my bike. It was a fashionable demonstration—I crushed the entire left side of my motorcycle.

Luckily, I was wearing all the required protective gear, including a bright, reflective vest. The articles that provided the most protection were my boots, gloves, helmet, and, most of all, my leather jacket, with integrated armor in the shoulders, elbows, forearms, and kidneys. Without that gear, I may not have been able to walk away with no broken bones. As it turned out, I immediately got up and didn't have a scratch on my body.

Perhaps you're wondering how long I've been riding to have let something like this happen to me. The answer is 16 years—and that doesn't include two years of amateur road-racing experience. Incidents like mine can happen to anyone. You have to be prepared to react in a split second. When I realized I had to put my bike on its side, I was glad to be wearing some of the best protective gear money can buy. Otherwise, I feel sure my story would have had a grotesque ending.

Summer 2004